The Barts Heart Centre Millennium User Guide

Written by Dr Elpida Charalampaki July 2014
Developed in consultation with Cardiology Team: Dr Andrew Wragg, Dr Christopher Primus, Dr Vikas Kapil, Dr Tania Dexter.
Revised version 25/03/15

Table of Contents

1. Overview....3
2. How to access Cerner Millennium....3
3. Inpatient Documentation - Clinicians....4
4. Inpatient Documentation - Nurses....13
5. Outpatient Documentation – Clinicians....15
6. Outpatient Documentation – Nurses....223
7. Troubleshooting....244
8. Appendices....25
   - Appendix 1 – e-CareLogic (e-CL) over N3 Barts User Guide
   - Appendix 2 – Autotext for Cardiology Ward Rounds
   - Appendix 3 – Autotext for Thoracic Ward Rounds
   - Appendix 4 – Autotext for Cardiac Ward Rounds
   - Appendix 5 – Barts Heart Centre Quick Reference Guide for viewing historic Heart Hospital Imaging

1. Overview

Functionality will be primarily based around the use of Cerner Millennium which will be connected and integrated to the following systems.

- EPR (clinical documentation)
- eTTA (discharge summary and TTAs)
- G2 speech (clinical dictation) (refer to
- Dendrite Pats (clinical audit)
- Sectra PACS (images) (***see Appendix 5***)
- UCLH CDR (images)
- e-CareLogic (e-CL) (***see Appendix 1***)
- Circle cvi42 (MRI and cardiac CT reporting)
- Echo analysis software (to be confirmed)
- WinPath (Pathology)

2. How to access Cerner Millennium

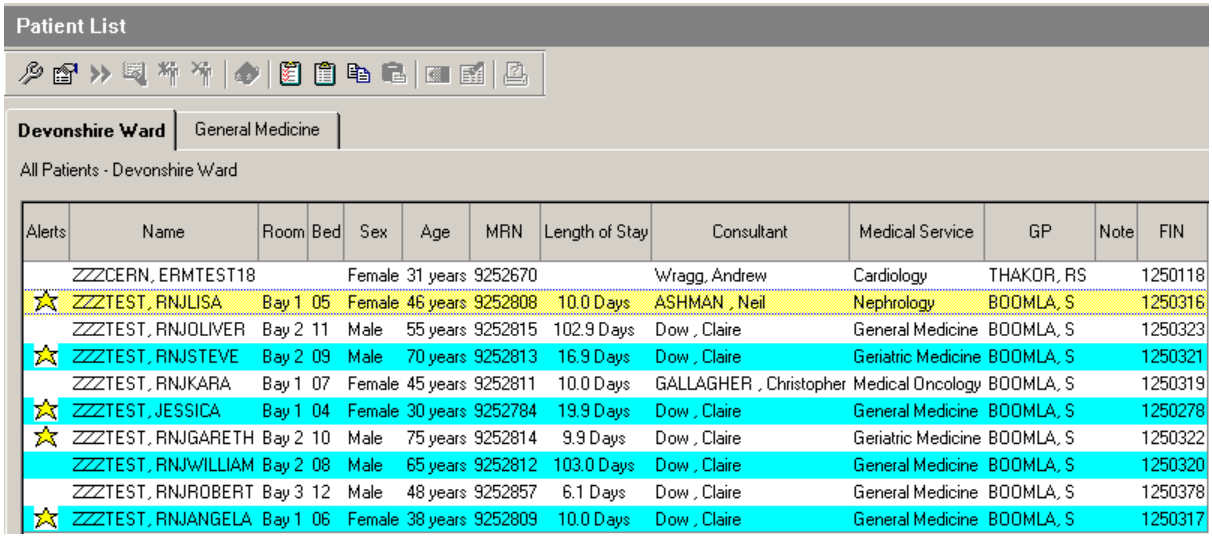
- Log into your PC using user-name & password provided from ICT department.
- Insert Smartcard into card reader.
- A pop – up box will appear, prompting you to enter your password.
- Enter password and select enter. Select the relevant access role starting with: BARTS AND THE LONDON NHS TRUST.
- Cerner millennium live can now be accessed via Start menu.

3. Inpatient Documentation - Clinicians

Double click on the **PowerChart** icon	

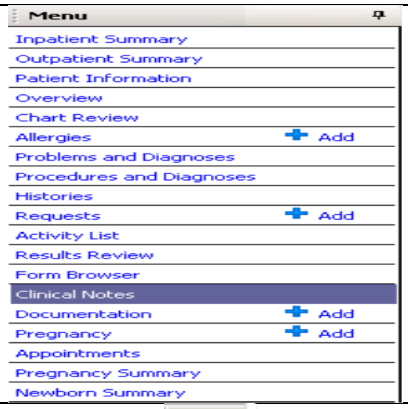
3.1. Patient Lists

On the **patient list**, double click the name of the patient on whom you want to make a new entry. This will open up the patient's CRS record



Alerts	Name	Room	Bed	Sex	Age	MRN	Length of Stay	Consultant	Medical Service	GP	Note	FIN
	ZZZCERN, ERMTEST18			Female	31 years	9252670		Wragg, Andrew	Cardiology	THAKOR, RS		1250118
☆	ZZZTEST, RNJLISA	Bay 1	05	Female	46 years	9252808	10.0 Days	ASHMAN , Neil	Nephrology	BOOMLA, S		1250316
	ZZZTEST, RNJOLIVER	Bay 2	11	Male	55 years	9252815	102.9 Days	Dow , Claire	General Medicine	BOOMLA, S		1250323
☆	ZZZTEST, RNJSTEVE	Bay 2	09	Male	70 years	9252813	16.9 Days	Dow , Claire	Geriatric Medicine	BOOMLA, S		1250321
	ZZZTEST, RNJKARA	Bay 1	07	Female	45 years	9252811	10.0 Days	GALLAGHER , Christopher	Medical Oncology	BOOMLA, S		1250319
☆	ZZZTEST, JESSICA	Bay 1	04	Female	30 years	9252784	19.9 Days	Dow , Claire	General Medicine	BOOMLA, S		1250278
☆	ZZZTEST, RNJGARETH	Bay 2	10	Male	75 years	9252814	9.9 Days	Dow , Claire	Geriatric Medicine	BOOMLA, S		1250322
	ZZZTEST, RNJWILLIAM	Bay 2	08	Male	65 years	9252812	103.0 Days	Dow , Claire	General Medicine	BOOMLA, S		1250320
	ZZZTEST, RNJROBERT	Bay 3	12	Male	48 years	9252857	6.1 Days	Dow , Claire	General Medicine	BOOMLA, S		1250378
☆	ZZZTEST, RNJANGELA	Bay 1	06	Female	38 years	9252809	10.0 Days	Dow , Claire	General Medicine	BOOMLA, S		1250317

3.2. How to make new documentation entries on Cerner millennium How to Modify/Amend and how to search for documents using Filters

Click on **"Clinical notes"** on the left hand side of screen to make new entry.	
Once clinical notes have been selected. Left click on this icon	

This will bring up the new document box.

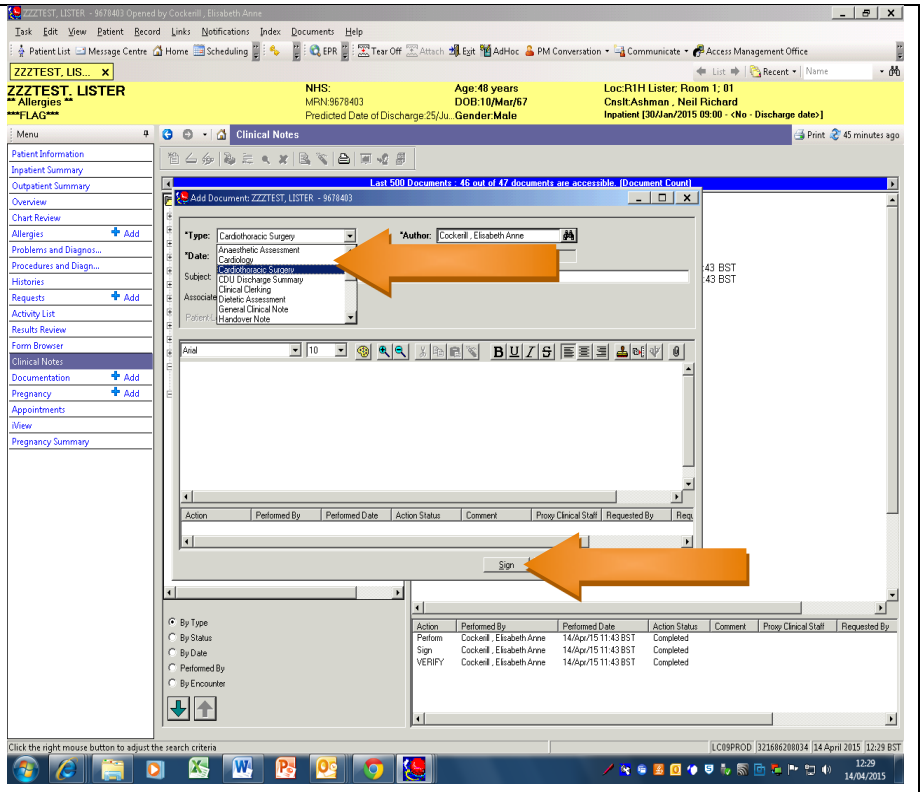
First select type of note. For ward round/reviews select: **Cardiology or Cardiothoracic surgery note**. The fastest way of doing so is by just typing 'C'.

Then put the title on the Subject space, e.g**. IP WR WK 1 Cardiology.**

You are now ready to document your entry.

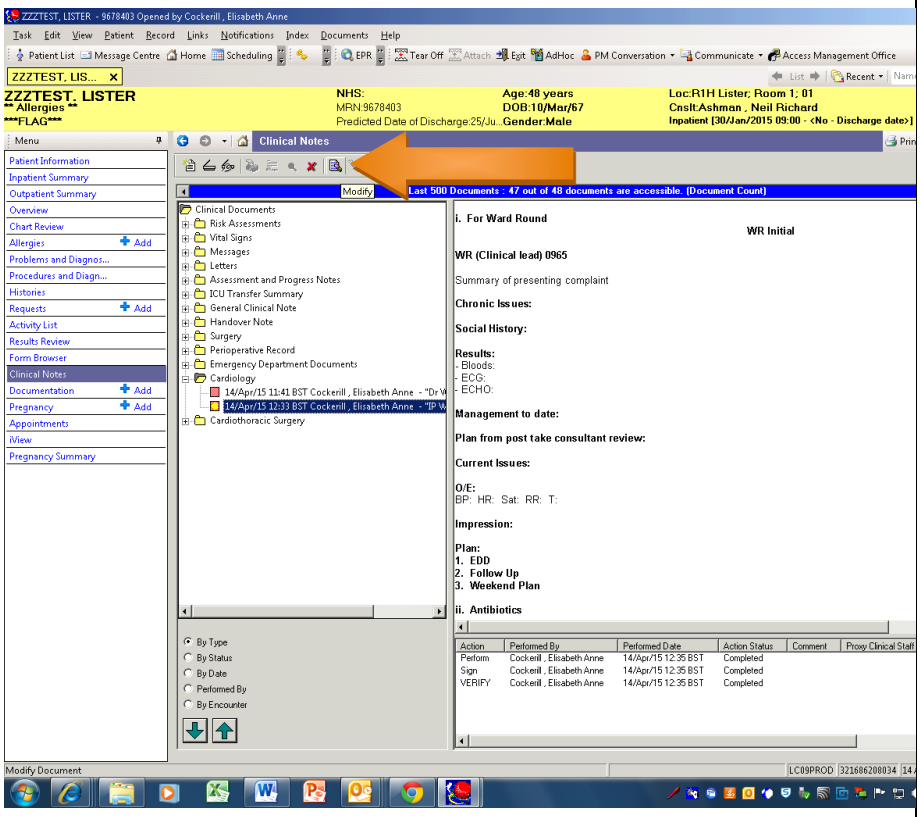
When you are finished select **'sign'**

Note: If you select save you will be the only one who can access the entry. This might be useful if you want to temporarily save your entry so that you can amend it later.



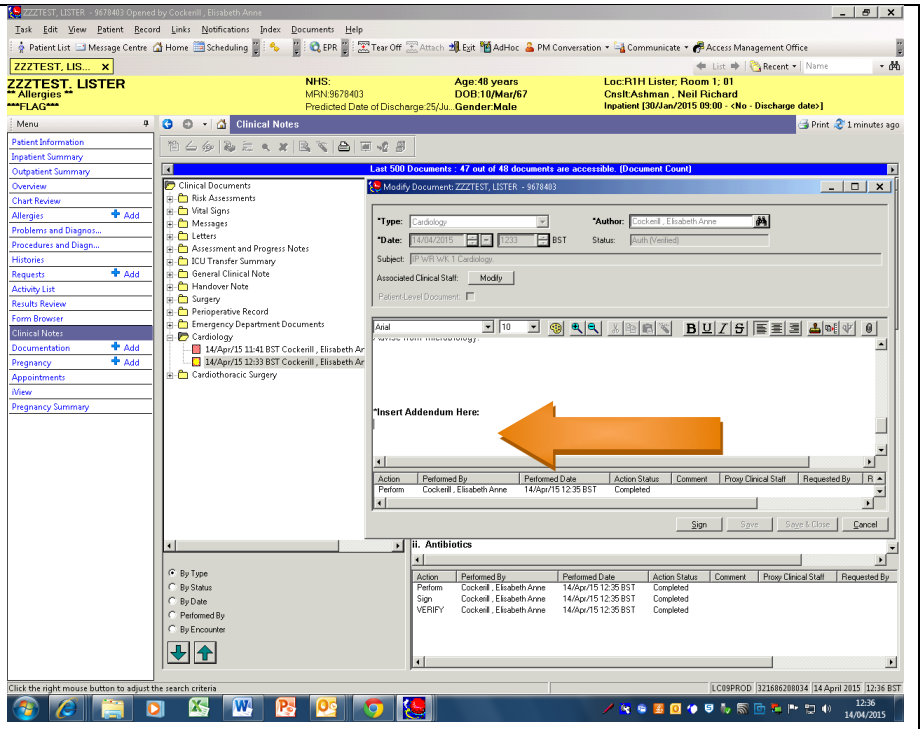
How to modify pre-existing entries:

Once within the patient's record (see above - steps 1-8) Click on **"Clinical notes"** on the left hand side of screen, select the document you wish to modify and left click on the Modify icon

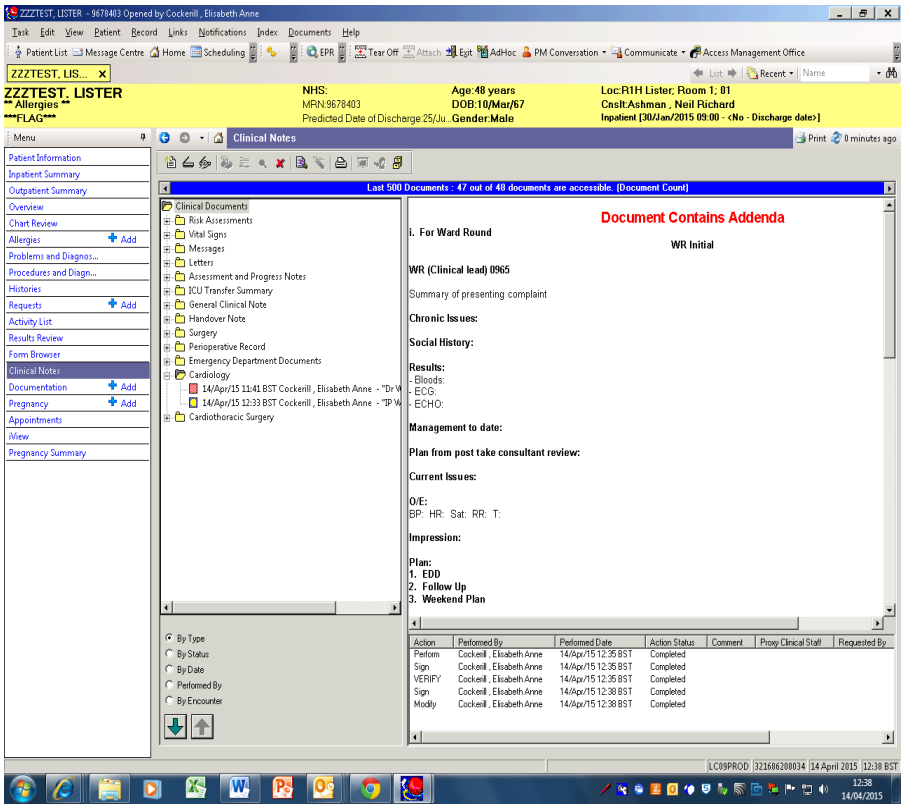


Type in under “Insert Addendum Here”

When you are finished select **‘sign’**

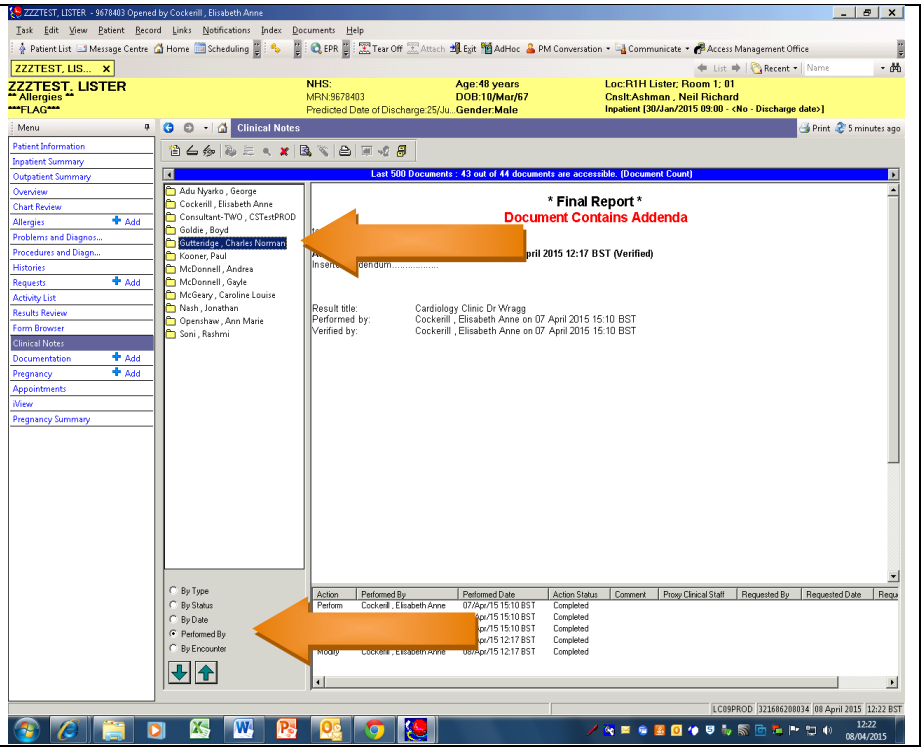


The document will now display the newly added text at the bottom of the page and state in red that the Document Contains Addenda.



Using Filters to View documents.

Documents can be filtered by several different methods to allow for ease of searching. This screen shot displays documents by “performed by” so you can view documents you have created yourself. You can also filter by Type, by Status, by Date and by Encounter



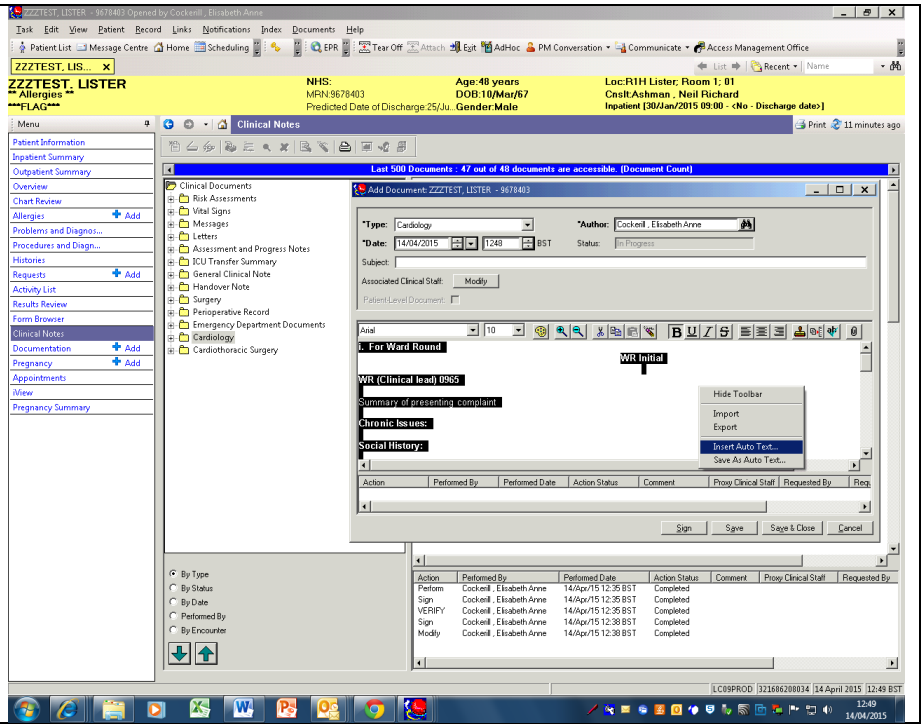
3.3. How to make shortcuts with Autotext

This is a CRS capacity with which you can make shortcuts that can automatically generate a full text by only typing a key word.

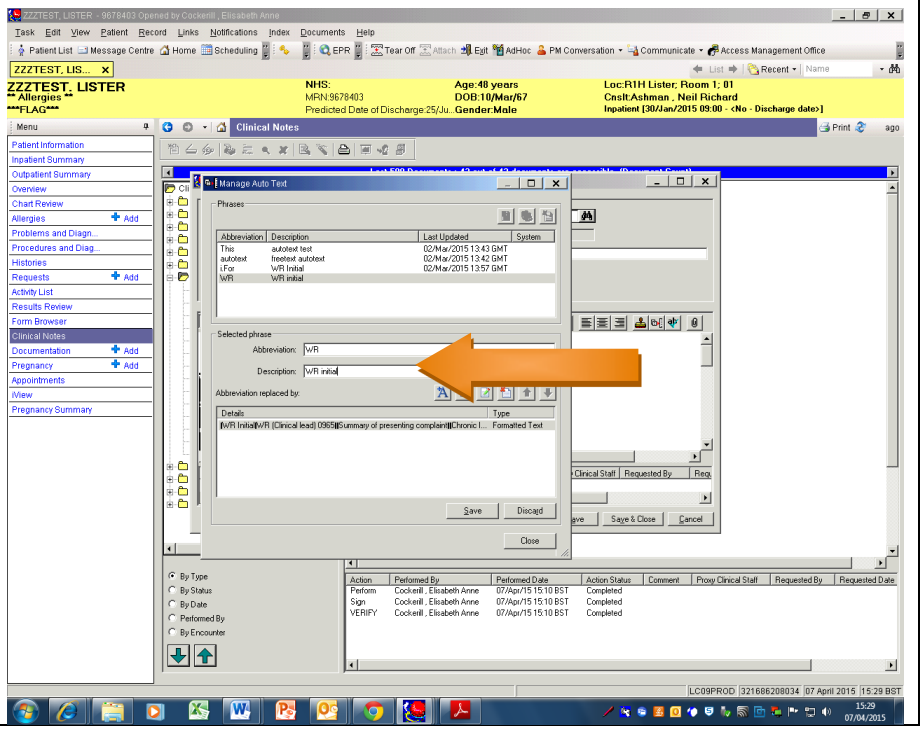
Type the text you want to save as an auto text.

Select all the text you typed and
then right click

Select the option ***Save as Auto text.*** You will be asked to provide an abbreviation



Type the **Abbreviation** and **Description** of the autotext and then press save.
From now on whenever you type the **Abbreviation** you will be provided with the option of generating the auto text.

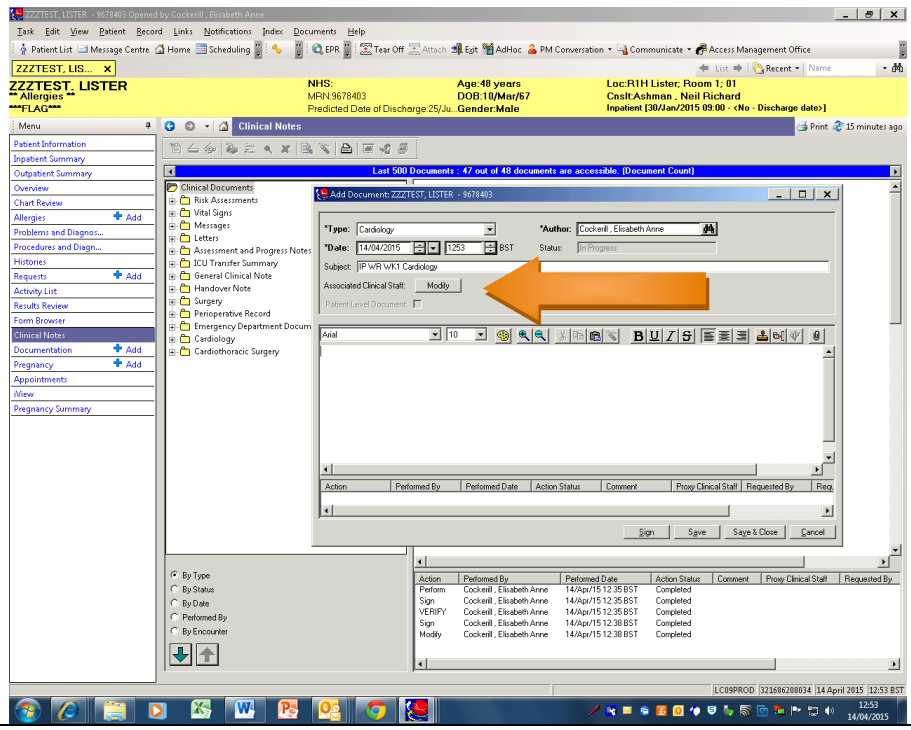


3.4. Basic Ward Round documentation principles on CRS

Day 1 on Ward.

Make a new entry on CRS as described above via ***clinical notes***, not documentation. Title it "**IP WR WK1 Cardiology**"

To insert the name of the Consultant in your entry click on modify. This is the box underneath the Subject box right next to "associated clinical staff". This should load another table. Type the name on the search box and click on the binoculars on the right, click ok.



- Now you are ready to document the WR on the main table.
- If you have time prior to WR it is sensible that you prepare the summary and save it. Unfortunately this can only be done on the 1st weekly entry. As practical as this is, note that when saving an entry it can only be viewed through your Smartcard. No one else can access it; ensure you sign during the WR.

Following days on Ward.

- Ward rounds are documented daily as a sequel of the initial entry.
- This can be done by going to documents as noted above and right clicking on the document titled **IP WR WK1** Cardiology and selecting modify from the list of provided options.
- You will not be able to save the document now, only sign it.
- Every Monday regardless of whether a patient was admitted on any other day apart from Monday, you will need to generate a new weekly document.
- Title the entry **WR WK 2, 3, 4** Cardiology accordingly, depending on which week you are on the patient's in-hospital stay.

3.5. What are we documenting on each ward round entry?

What you would have documented in a normal paper ward round.
Given the experience the team has had with electronic documentation and an on-going audit, we have agreed on a minimum of information that needs to be included. However complicated this might sound it does serve a purpose, especially out of hours and in the event of a cardiac arrest. In this context it is very difficult for the arrest team to be going through paper as well as electronic documentation.
To make this less time consuming we use shortcuts and in particular auto text.

3.6. Auto texts we use

For clarity and for continuation we use the auto-texts in **Appendix 2, 3 and 4** that you need to save in your Smartcard before starting with Cardiology firm.

Please see above **3.3. How to make shortcuts with Autotext**

3.7. Ward Round Entry:

- WR Clinical lead bleep
- Summary of presenting complaint: include at least the day of admission and presenting complaint, e.g. 48 year old lady admitted on the 09/12 with SOB
- Chronic Issues: refers to PMH & SH. Given that we found that on many occasions we omitted the social history on at least the Initial WR entry you are also prompted to provide a SH below chronic issues.
- Results refer to relevant presenting blood results / blood Gases / ECG / other investigation results. You are expected to have at least documented significantly abnormal blood results, Troponin if appropriate, ECG finding and ECHO.
- Management to date refers to the treatment the patient has received, for example ACS protocol, diuretics, inhalers depending on the main issue.
- Plan from post take ward round refers to the plan made by the Cardiology Consultant who first reviewed the patient post triage. This is again because post take happens on the Acute Medical Ward where documentation is on paper.
- Current issues refer to the problems that are keeping the patient in the hospital or issues that have been recognised during this admission. This means that although a patient might not be kept in the hospital because of hypokalaemia it is still an issue that needs to me addressed.
- O/E: On examination refers to current observations & current examination. It is absolutely crucial that you make sure a note is made of at least patient's vitals.
- Impression can be as per current issues or at least a comment on whether team thinks patient is doing better or worse.
- Plan:

EDD: Estimated discharge date – make sure you prompt your senior to provide you with such a date. This will turn out to be very helpful for many things including the morning MDT as well as prioritising the discharge letters you have to write.

Follow up plan needs to be documented if patient's discharge date is approaching

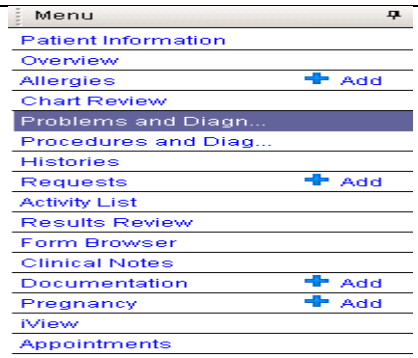
If it is Friday a *weekend handover* will need to be made for the patient. This will help you when populating the weekend handover application. You will know beforehand which patient will need to be reviewed by whom (FY1, Medical SpR, Cardiology SpR).

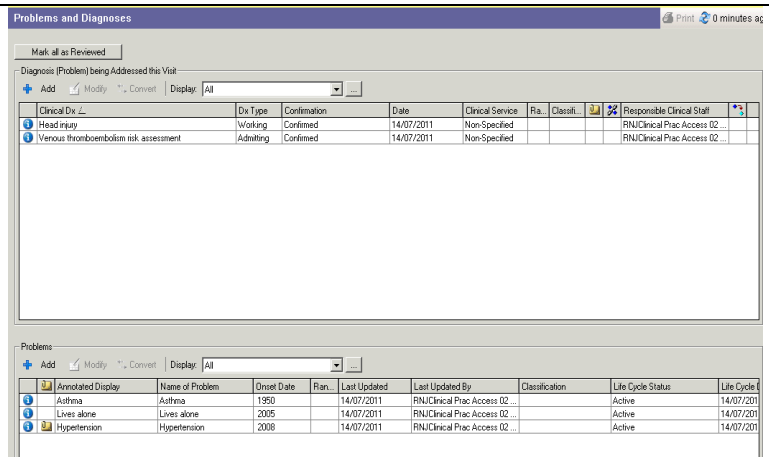
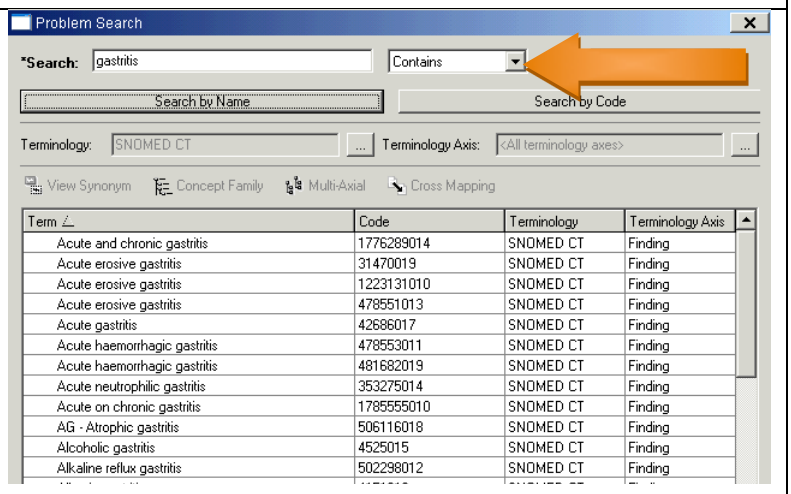
If patient is unwell make sure there has been some consideration of the escalation plan should they deteriorate out of hours

Daily ward round is documented on the same principles. However the feeling is that there is no need to duplicate information such as the post take plan as long as it has been

documented electronically. On-going issues should be documented daily as they ensure there is on-going consideration of both acute and chronic problems, as well as for discharge planning.

3.8. SNOMED coding

<table>
<tr>
<td>Within the patients record Select Problems and Diagnosis from the Menu options displayed on the left of the window.</td>
<td> 
</td>
</tr>
<tr>
<td>Diagnosis – the higher window
Problems – the lower window.
Click on 

type and search the diagnosis you want to add.</td>
<td> 
</td>
</tr>
<tr>
<td>Click on Search by Name.
Set filter to contains returns more coded terms
Select the appropriate SNOMED term.
To add the SNOMED term to your Favourites folder click Add to Favourites.
Click OK.</td>
<td> 
</td>
</tr>
</table>

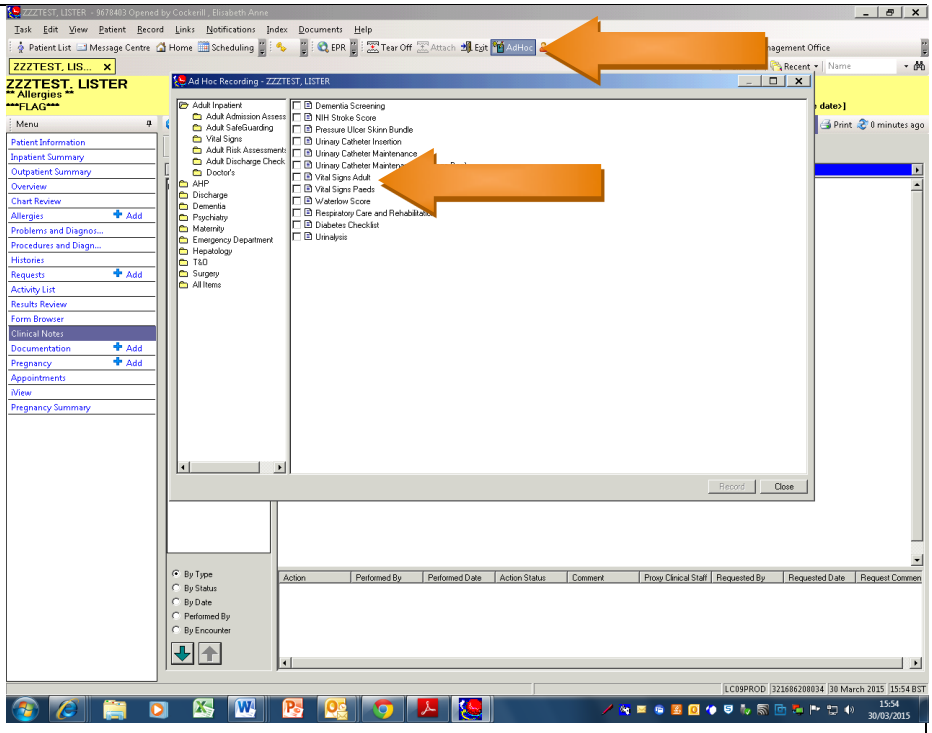
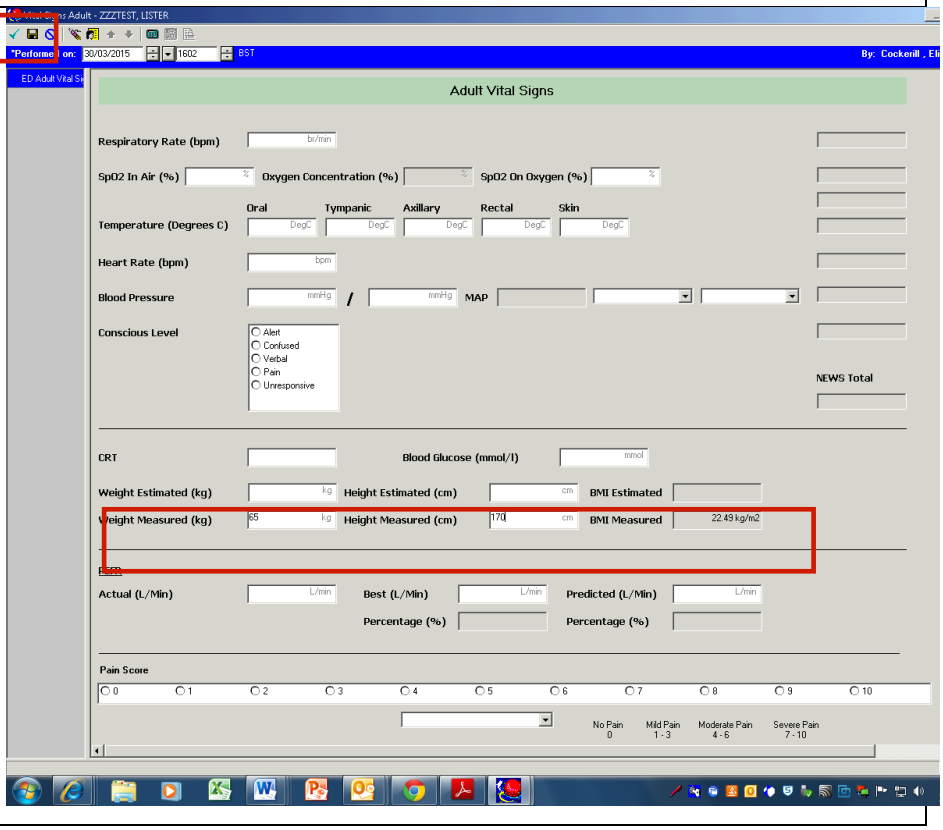
Note that this is where you will also need to electronically record VTE assessment if not already done.

Make sure **SNOMED** coding is populated with all the diagnosis for each patient including

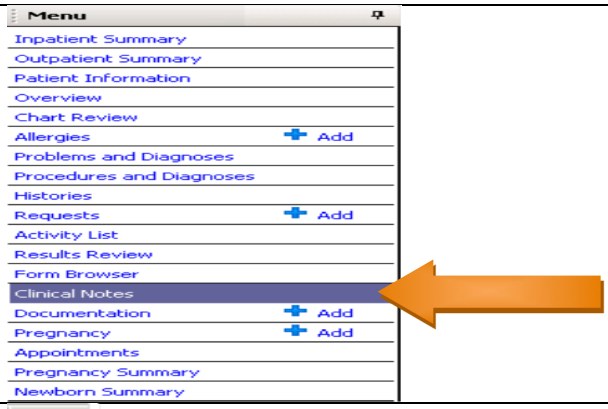
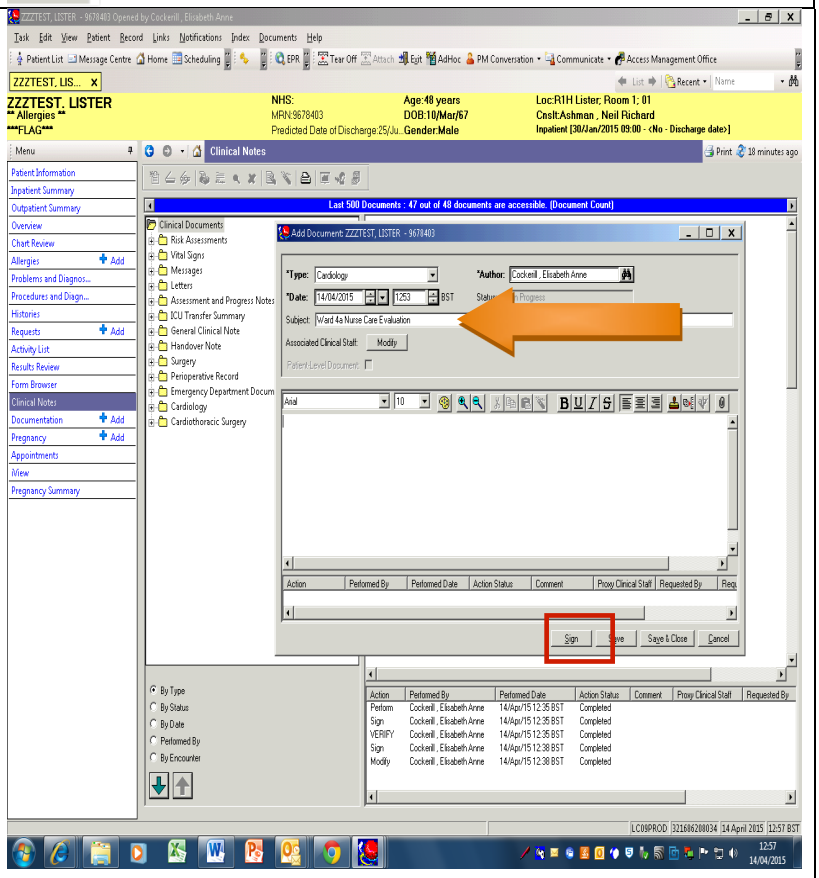
important information for patient's that are considered high risk. For example if patient is homeless or an IVDU or colonised by bacteria (MRSA positive), has a permanent catheter and so on and so forth.

4. Inpatient Documentation - Nurses

4.1. Entering Height and Weight

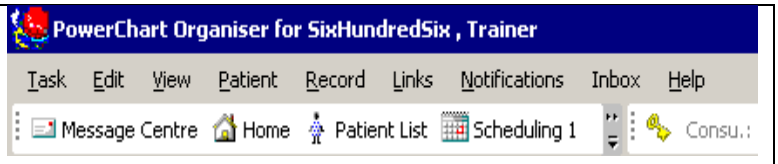
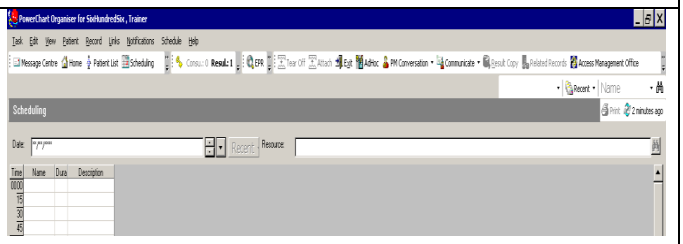
Click on Adhoc Recording Select Vital Signs Adult and Record	
Click in **Weight Measured** and record actual weight Click in **Height Measured** and record actual. This automatically creates and records the BMI Click on the **Tick** to sign	

4.2. Entering a Nursing Care Evaluation

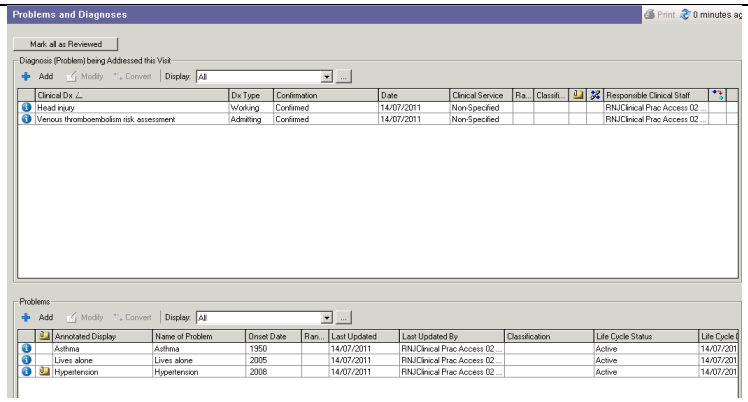
Click on **"Clinical notes"** on the left hand side of screen to make new entry.	
Once clinical notes have been selected. Left click on this icon	
This will bring up the new document box. First select type of note. For Nursing Care Evaluation notes, select **Cardiology or Cardiothoracic surgery note**. The fastest way of doing so is by just typing 'C'. Then put the title on the Subject space, e.g. **Ward 4a Nurse Care Evaluation**. You are now ready to document your entry. When you are finished select **'sign'** Note: If you select save you will be the only one who can access the entry. This might be useful if you want to temporarily save your entry so that you can amend it later.	

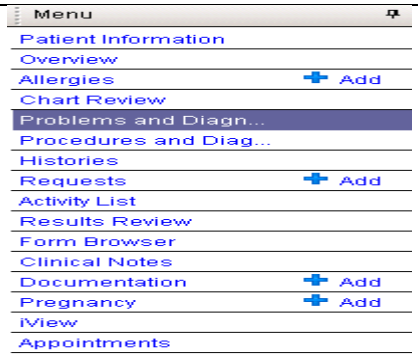
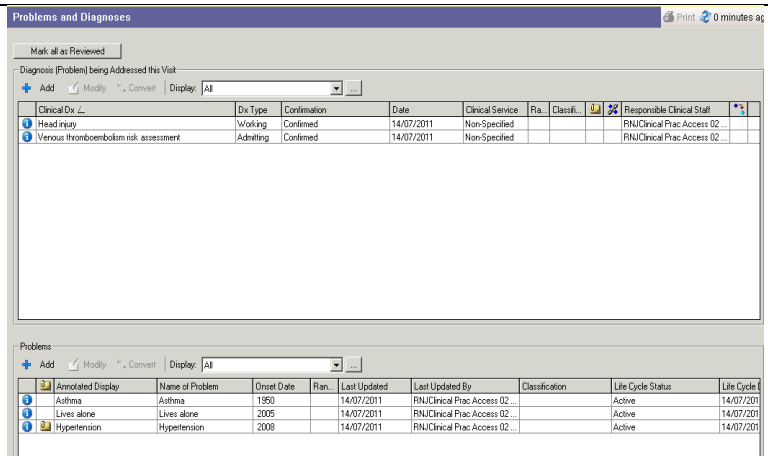
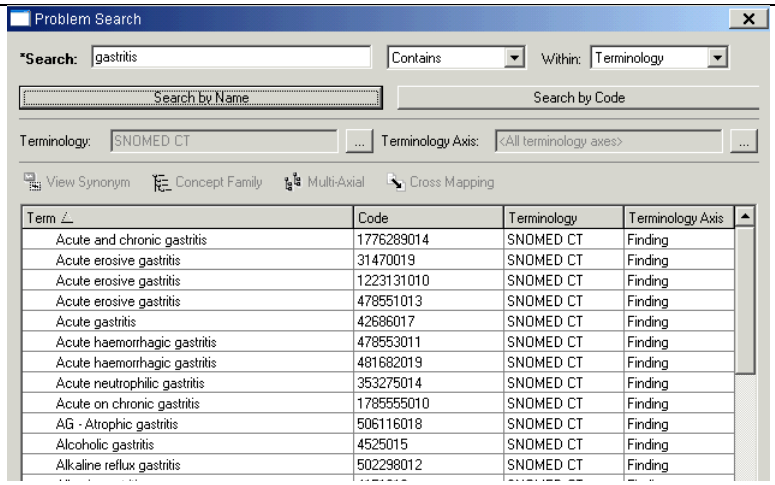
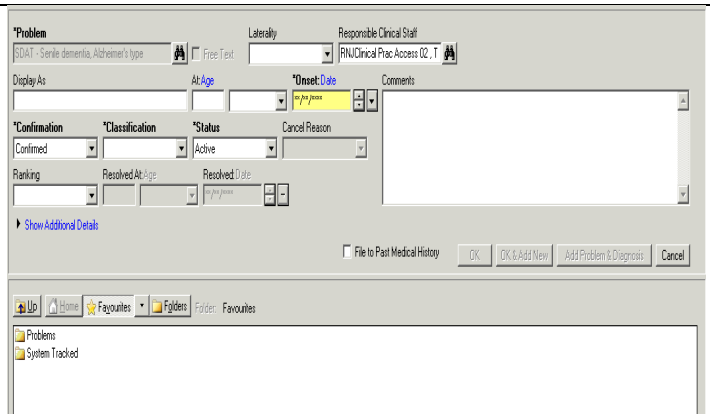
5. Outpatient Documentation – Clinicians

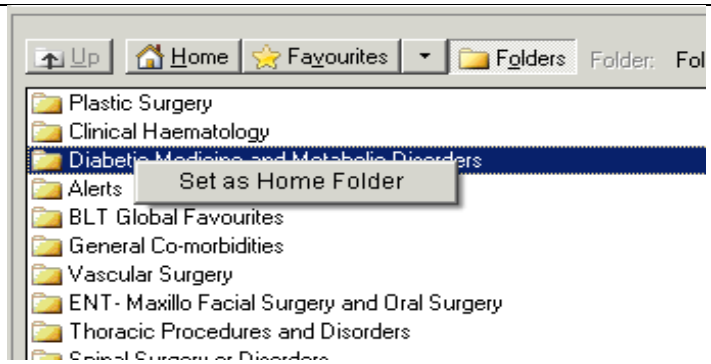
5.1. *Scheduling Lists* will be used to navigate clinic lists

Within Powerchart **Click** on Scheduling icon on Tool bar Or **Click** View in Task bar and select Scheduling	
To View a Clinic List for Lead Clinician In the Resource field, Click on the binoculars to select the consultant Enter the required Clinic day in the Date field The clinic for the chosen clinician will display	

5.2. Reason for consultation to be entered into Millennium as a SNOMED coded *Problem*

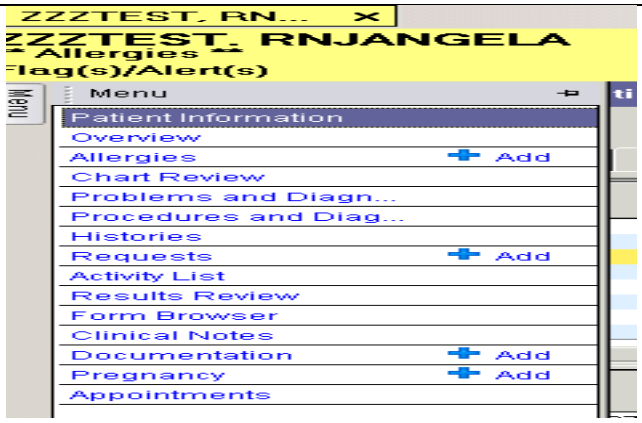
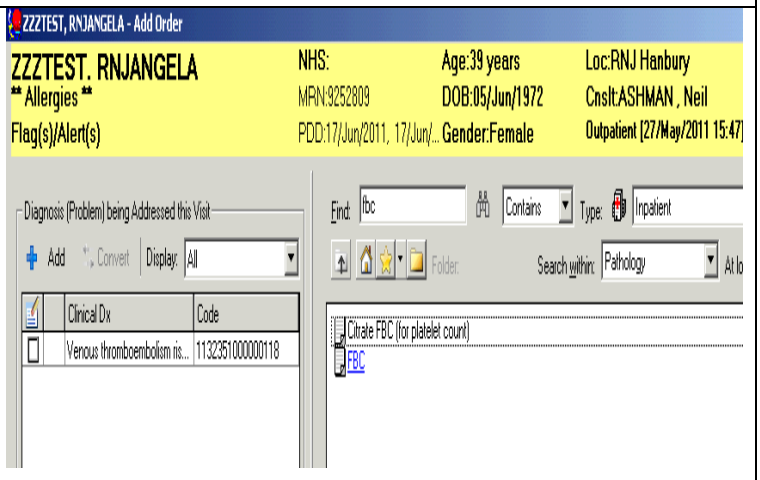
Ensure you have selected the correct patient on the patient banner bar. Click on  Problem	

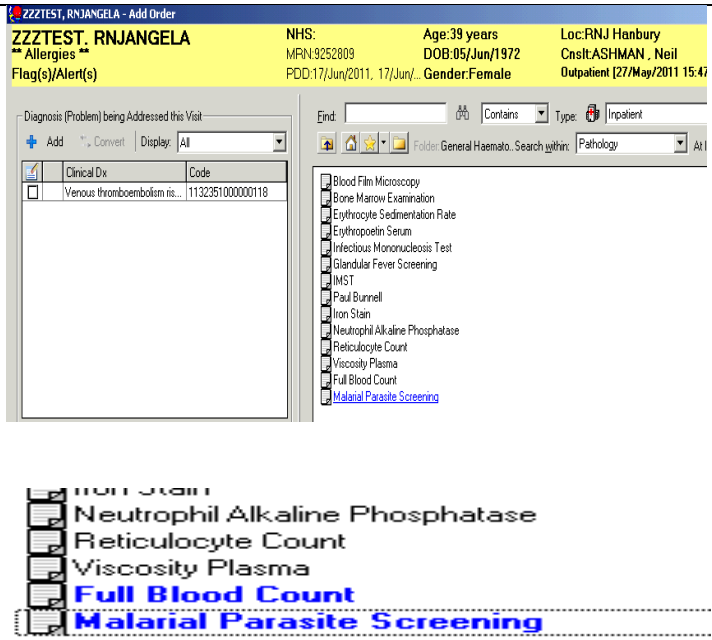
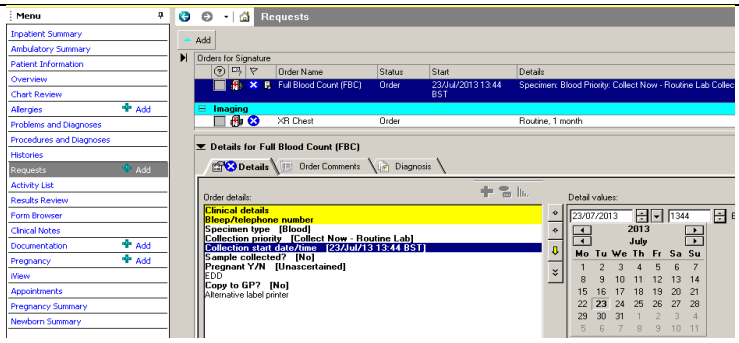
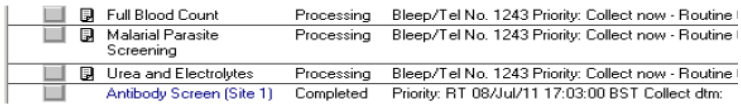
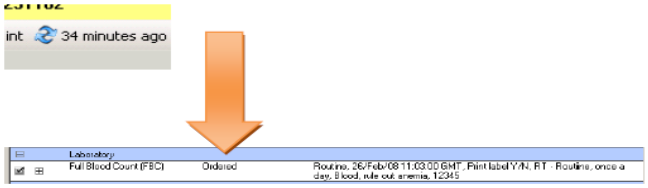
Within the patients record Select Problems and Diagnosis from the Menu options displayed on the left of the window.	
Diagnosis – the higher window Problems – the lower window. Click on  type and search the diagnosis you want to add.	
Click on Search by Name. Set filter to contains to return more coded terms. Select the appropriate SNOMED term. To add the SNOMED term to your Favourites folder click Add to Favourites. Click OK.	
To view Favourites folders, click on **Favourites** button.	

Any folder can be set as your Home folder – right click on the folder and select Set as Home Folder. Please refer to User guide **CLIN08** for further details on favourite folders.	

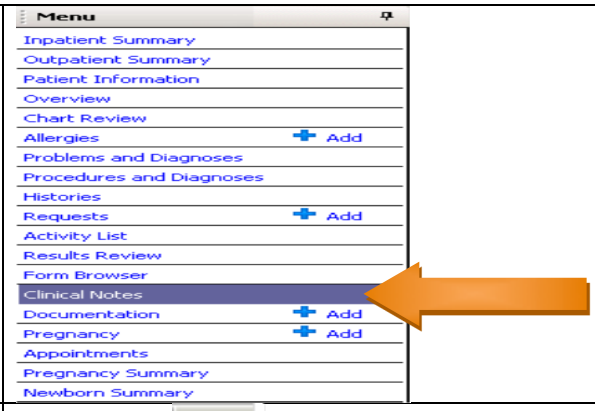
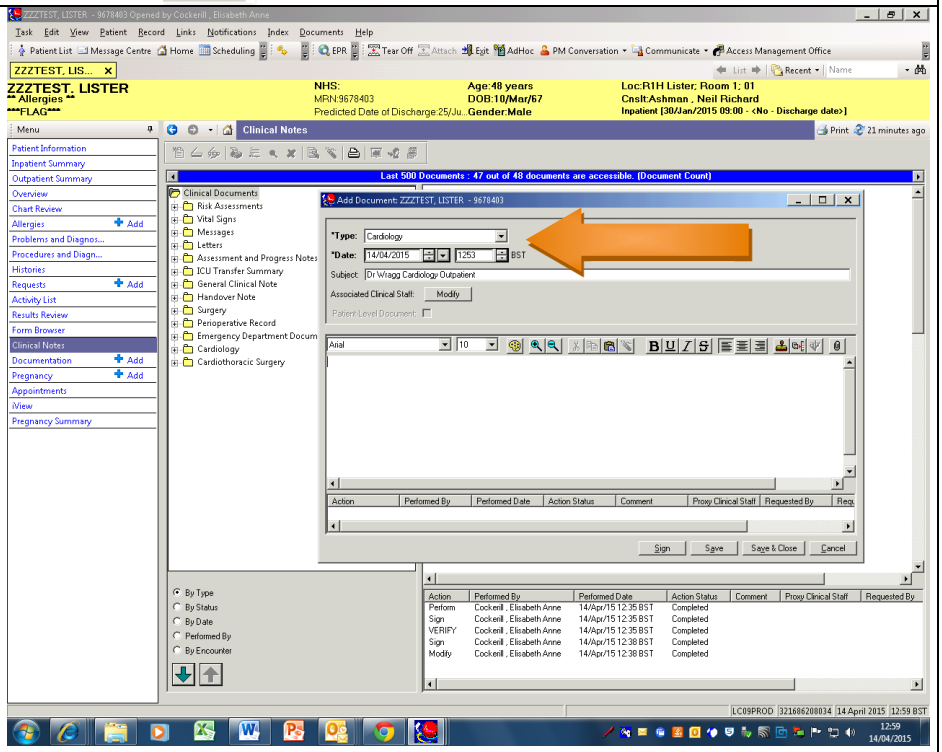
Patient's diagnoses and previous procedures will be entered into Millennium as SNOMED coded ***Diagnoses and Procedures and Investigations*** (supported by ***Favourites folders***)

5.3. Requesting of diagnostic tests e.g. ECHO (Refer to user guide CLIN05 for further details)

Once you have located the patients record, Click on the +Add button next to the **Requests** option.	
Enter the name or the start of the name of the request in the '**Find**' search box. The user may search for any order within the entire trust catalogue using either the '**Starts with'** or '**Contains**' options. Note that the system requires a minimum of **3** characters when using the '**Contains**' option.	
Next to each test there is a icon. **Click** this icon to find out	

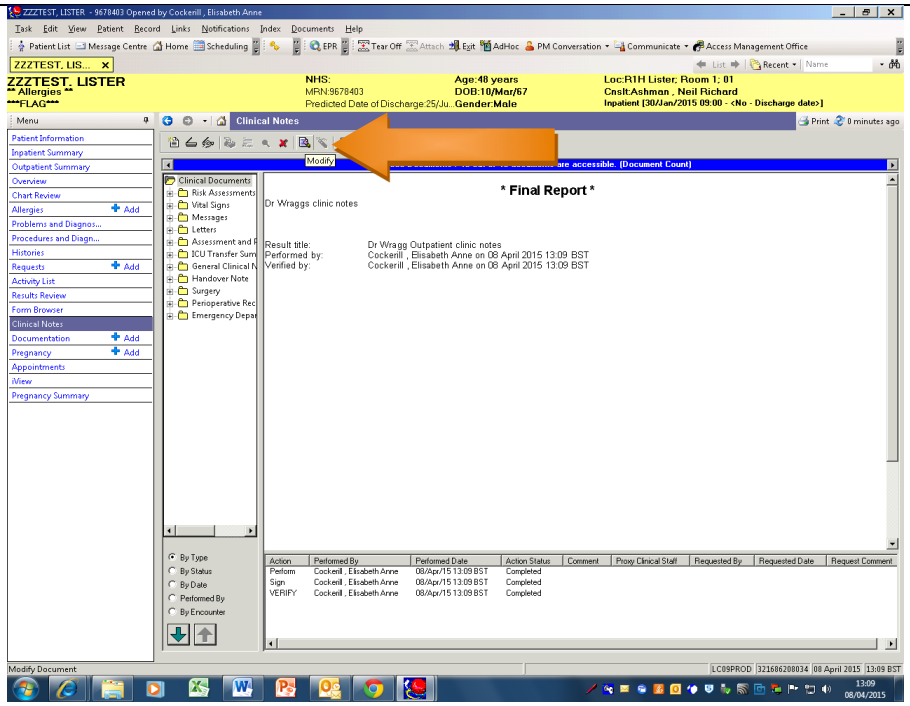
more about a test using the link displayed in the reference text window that appears. This is used for decision support. **Click** on the Test(s) to be ordered. The order will turn blue and be bold. It is possible to select multiple orders together by clicking on them. Each item to be ordered will be blue and be bold.	
Click the **Done** button to proceed once all the requests have been selected. Complete the **Order Details**, ensuring the mandatory (yellow) fields are populated.	
Once the request order entry fields have been completed (there should be 0 missing required details shown in the bottom left hand corner) click **Sign** The order status will be **Processing** on the Order Profile. Click on the button showing the number of minutes since you last refreshed the screen. This will refresh the screen. The order status of the request will be updated from **Processing** to **Ordered**.	  

5.4. Notes from the consultation will be entered into Millennium as a *Clinical Note*

Click on **"Clinical notes"** on the left hand side of screen to make new entry.	
Once clinical notes have been selected. Left click on this icon	
This will bring up the new document box. First select type of note. For ward round/reviews select: **Cardiology or Cardiothoracic surgery note.** The fastest way of doing so is by just typing 'C'. Then put the title on the Subject space, **e.g. Dr Wragg Cardiology Outpatient** You are now ready to document your entry. When you are finished select **'sign'** Note: If you select save you will be the only one who can access the entry. This might be useful if you want to temporarily save your entry so that you can amend it later.	

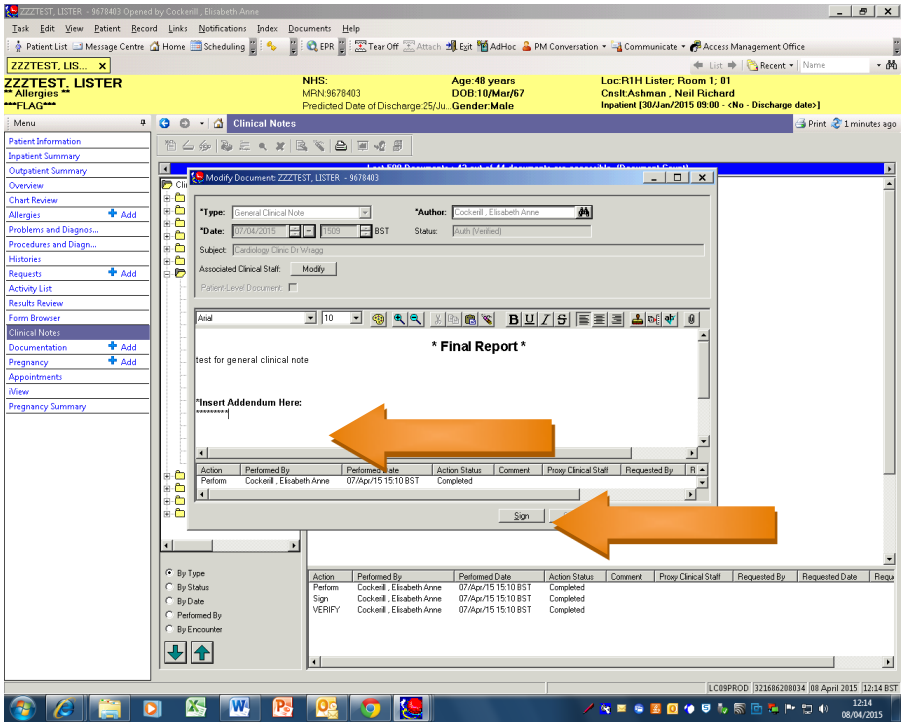
How to modify pre-existing entries:

Once within the patient's record (see above - steps 1-8) Click on **"Clinical notes"** on the left hand side of screen, select the document you wish to modify and left click on the Modify icon

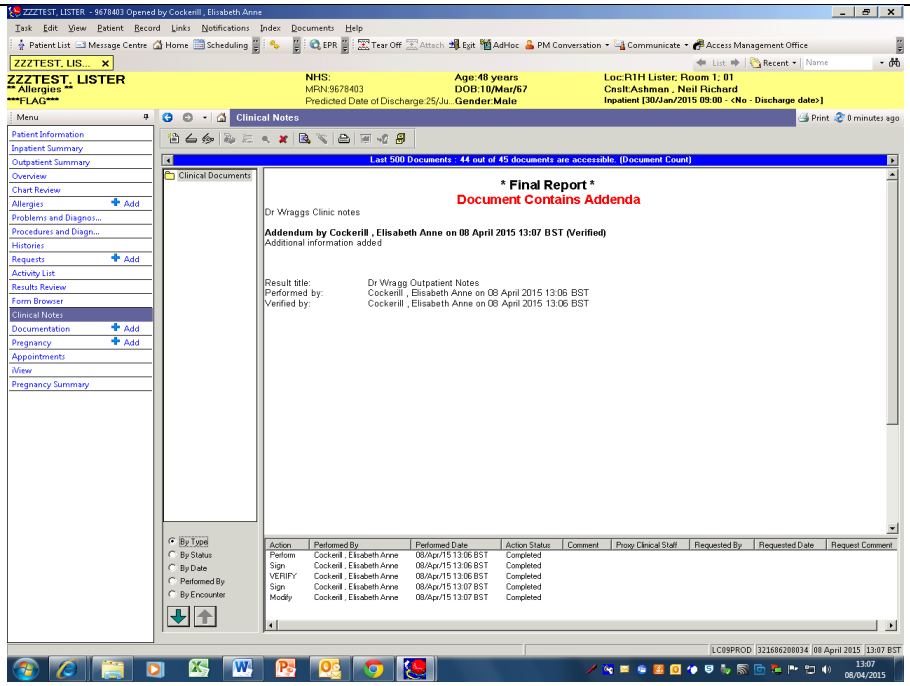


Type in under "Insert Addendum Here"

When you are finished select **'sign'**

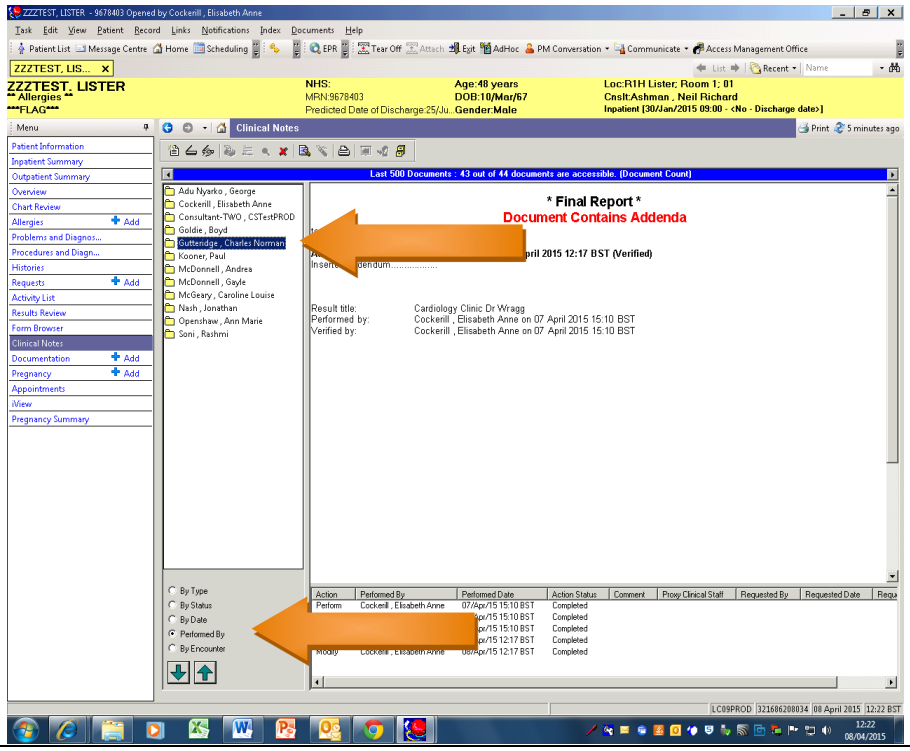


The document will now display the newly added text and state in red that the Document Contains Addenda.



Using Filters to View documents.

Documents can be filtered by several different methods to allow for ease of searching. This screen shot displays documents by "performed by" so you can view documents you have created yourself. You can also filter by Type, by Status, by Date and by Encounter



5.5. Correspondence will be dictated via G2 speech and letters will be transcribed and stored in EPR

- All results will be viewable in Millennium supported by EPR hyperlink
- All images will be viewable via PACS hyperlink

6. Outpatient Documentation – Nurses

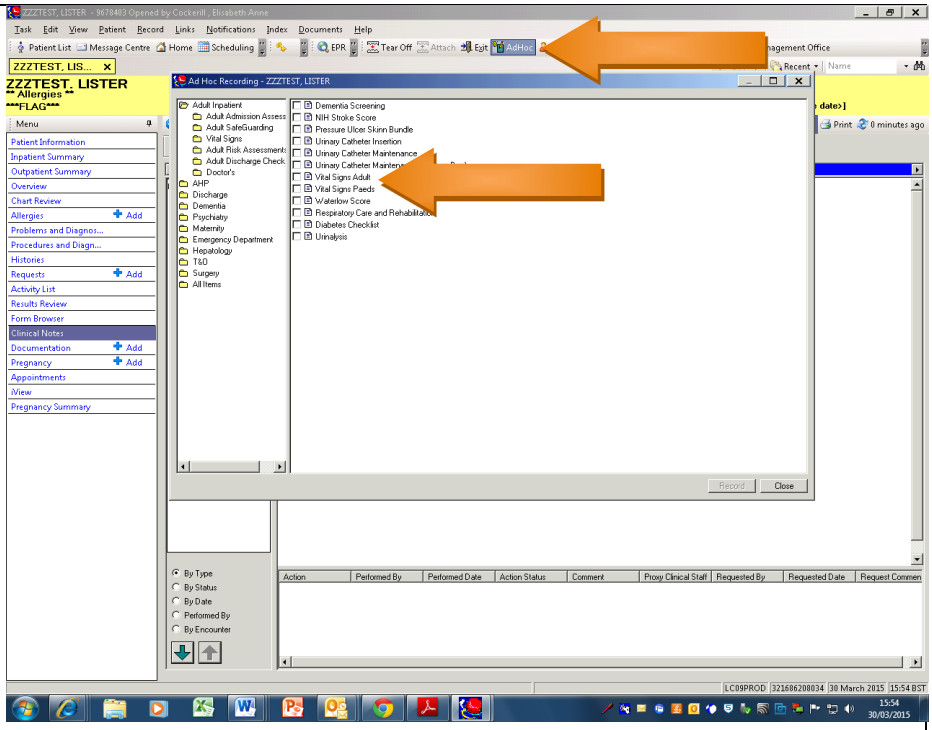
6.1. Entering Height and Weight

Click on Adhoc

Recording

Select Vital Signs

Adult and Record

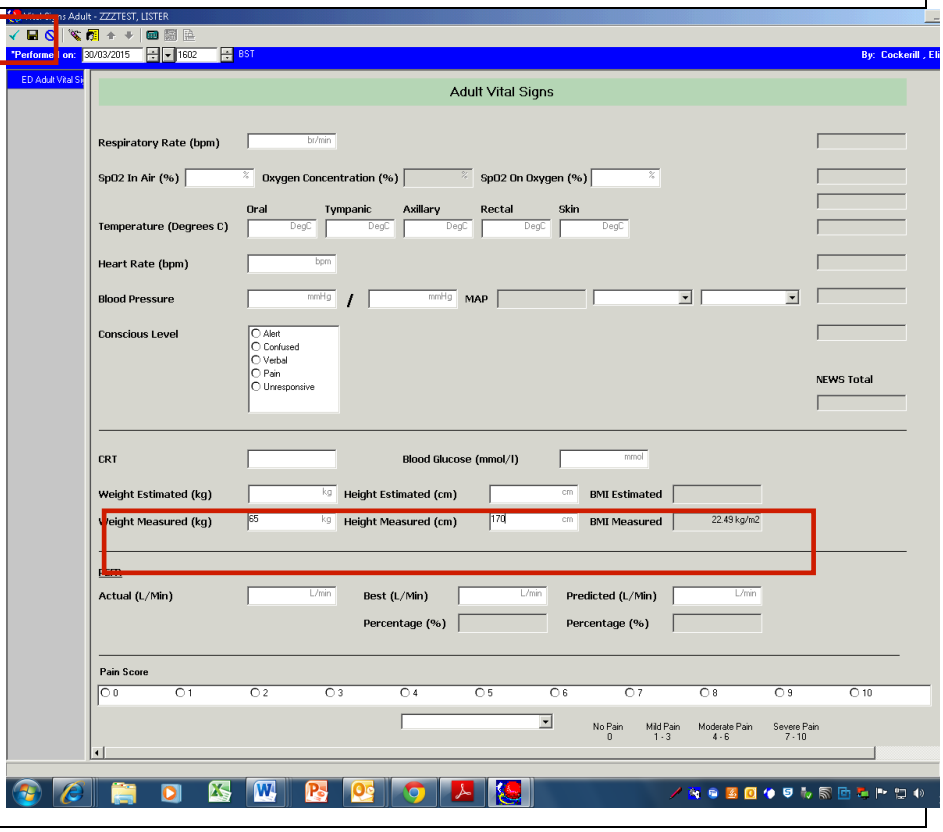


Click in **Weight Measured** and record actual weight

Click in **Height Measured** and record actual.

This automatically creates and records the BMI

Click on the **Tick** to sign



7. Troubleshooting

7.1. CRS downtime

Ensure you have undertaken your CRS training and you have a valid Smartcard.

If both you and your colleagues are unable to log into CRS, it is very likely this is a CRS downtime issue. In this case ward round can be typed on a word document and then copied and pasted to CRS when the system is once again live. There are plans to have a back-up system in the near future where past entries can be reviewed but not modified. Blood results can be accessed via Winpath and images via Barts Health PACS viewer.

7.2. Winpath access

Go to start menu

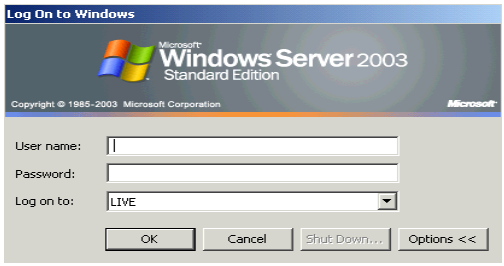
Select option _WardEnq

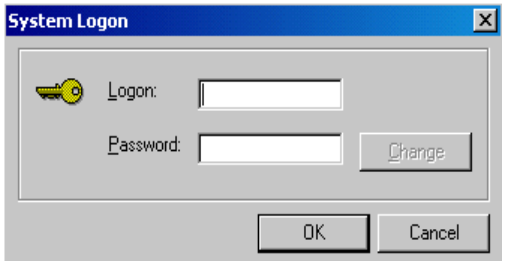
Type in your personal logging details in the first window; titled LogOn to Windows.

Type in the following details in the second window; titled System Logon.

Login: hourihm

Password: Price12





7.3. Logging issues with ICT helpdesk

- ICTservicedesk@bartshealth.nhs.uk
- 47680 or 020 7377 7680
- Or for urgent ICT problems please call the dedicated **Barts Heart Centre ICT hot phone** (live now): **07984368192**

If you choose to log an issue with ICT via email, remember it is helpful to copy and paste a print-screen of the error message you get on your screen to the email you send to ICT.

e-CareLogic Over N3 Barts User Guide

Experience the commitment®

Access to e-CareLogic (e-CL) is now available to users with valid login credentials. This is a user guide on how to access e-CL over the N3 network and also includes details for support.

Gaining Access to e-CL over N3

1. The N3 connected user enters the URL for e-CareLogic into the Barts desktop through Internet Explorer 8. URL: https://*nww.ecarelogic.uclh.nhs.uk*.
2. Users must have an e-CL account provided by UCLH, and these credentials should be used to access e-CL over N3.
3. The user must enable pop up blockers in order to launch the site. If unsure how to do this then contact Barts support desk.
4. The user must select *yes* when presented with the following pop up message – *The webpage you are viewing is trying to close this tab. Do you want to close this tab?*
5. The session will remain open as long as the browser window is open. When closing the browser window, the session will expire and the user will need to login to access again (see step 1).

Compatibility Settings

The user must ensure the following compatibility settings are enabled:

- Check if 'Compatibility View' is enabled (under tools> compatibility view settings).
- The above settings only need to be applied once.

Functionality Available on e-CL over N3

There are some areas which will be unavailable to users accessing e-CL over N3. Areas unavailable:

- PACS Web access
- Op Notes drawings
- Document scanning
- Ops Centre reports
- 18 week reports
- Certain Links (where these point to URLs internal to UCLH)

Desktop Requirements

- e-CL is, at present, is only warranted for desktop access (and not laptops or tablets)
- Windows 7
- **Internet Explorer 8.** Attempts to access e-CL over N3 using an alternative browser will result in an error message advising the user to access again using an approved browser.

Support

Any issues (including password re-sets) with connecting to e-CL Over N3 should be raised as per below:

- Support is provided by the CGI Service Desk:
  - Email: IT.Servicedesk@uclh.nhs.uk
  - Contact number: 0203 447 9367
  - Hours of support:24/7
- Ensure when logging the issue you state that you are accessing e-CL from Barts.
- All incidents raised will be assigned a ticket number that will be used in all future correspondence with the user.

Any issues relating to other applications used on the Barts desktop should be raised as per below:

- Email: **TBC**
- Contact number: **TBC**
- Hours of support:24/7

Appendix 2

Autotext to be created for Cardiology ward rounds

WR Initial

WR (Clinical lead) 0965

Summary of presenting complaint

Chronic Issues:

Social History:

Results:
- Bloods:
- ECG:
- ECHO:

Management to date:

Plan from post take consultant review:

Current Issues:

O/E:
BP: HR: Sat: RR: T:

Impression:

Plan:
1. EDD
2. Follow up
3. Weekend plan

ii. Antibiotics

Abx

Indication:
Agent:
Duration:
Stop Date:
Advice from microbiology:

WR Daily

WR (Clinical lead) 0965

Current Issues

Chronic Issues
(including past medical history & social history)

Results:
- Bloods:
- ECG:
- ECHO:

O/E:
BP: HR: Sat: RR: T:

Impression

Plan:
1. EDD
2. Follow up
3. Weekend plan

Appendix 3
Autotext to be created for Thoracic Ward Rounds

WR Lead:
Date:
Time:

Operation: Day X post – XXXXXX
Significant comorbidities and issues:

Patient well / unwell – details

Labs:
Significant CXR findings:
Significant blood results:

Pain control:
Modality: Epidural PVB PCA Oral
Pain Score at rest: /10
Able/Unable to cough effectively
Mobilised / Not mobilized

Observations:
Temperature:
HR: SR/AF
BP:
Saturation:
Oxygen requirement:

Drains:
Apical – X mls, XX suction, airleak intermittent/on cough/on expiration/continuous
Basal – X mls, XX suction, airleak intermittent/on cough/on expiration/continuous
XX – X mls, XX suction, airleak intermittent/on cough/on expiration/continuous

Medications review:
VTE prophylaxis
Analgesia
Nebulisers
Laxatives

Antibiotics:
Drug:
Indication:
Day:
Culture results:

Plan:

Drains: Leave on suction / Off suction / Drain out / Other
Imaging: portable/ward CXR
Antibiotics:
Bloods:
Discharge planning: When? TTAs?
Others changes and plans

Appendix 4
Autotext to be created for Cardiac Ward Rounds

WR Lead:
Date:
Time:

Operation: Day X post - XXXXXX
Significant comorbidities and issues:

Patient well / unwell - details

Labs:
Significant CXR findings:
Significant blood results:

Observations:
Temperature:
HR:
Rhythm:
Pacing:

BP:
Saturation:
Oxygen requirement:

Weight difference:

Wounds:

Medications review:

VTE prophylaxis	-
Aspirin	-
Ranitidine	-
Diuretic	-
ACEi	-
Betablocker	-
Statin	-
Analgesia	-

Antibiotics:
Drug:
Indication:
Day:
Culture results:

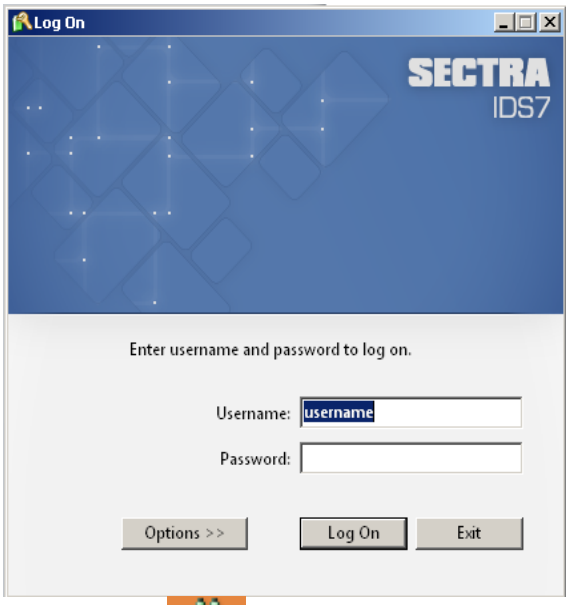
Plan:

ECG
Pacing Wires:
Antibiotics:
Bloods:
Discharge planning: When? TTAs?
Others changes and plans:

Appendix 5

Barts Heart Centre – Quick Reference Guide
Viewing Historic Heart Hospital Imaging

1. Log on to Bart Health PACS the link can be found on all PC's Start menus "Barts Health PACS Viewer" using your Barts Health Trust computer login credentials



2. Click on the 

icon on the top tool bar to display the search area

3. To search enter the patient's name (format Surname, Forename) and Date of Birth. Alternatively changing the search criteria to Patient ID and searching with the patient's historic Heart hospital number prefixed with HH (i.e HH0012345).